



## Presenting a Model for a Creative and Entrepreneurial Sports Science Faculty

Javad Radanfar <sup>1\*</sup>, Hossein Eidi <sup>2</sup>

1. Master's Student in Sports Event Management, Faculty of Sport Sciences, Razi University, Kermanshah, Iran
2. Associate Professor of Sports Management, Faculty of Sport Sciences, Razi University, Kermanshah, Iran

\* Corresponding Author Email: [radan662016@gmail.com](mailto:radan662016@gmail.com)



Copyright ©The authors

Publisher: [University of Kurdistan, Sanandaj, Iran](https://www.uok.ac.ir/)

This is an open access article under the CC BY-NC 4.0 License (<https://creativecommons.org/licenses/by-nc/4.0/>)

DOI: [10.22034/sms.2025.142557.1428](https://doi.org/10.22034/sms.2025.142557.1428)

### ABSTRACT

Received: 20.11.2024

Revised: 20.02.2025

Accepted: 09.03.2025

Available online: 21.03.2026

#### Keywords:

*Faculty of Sport Sciences, Model, Creativity, Entrepreneurship*

Promoting entrepreneurial thinking among university graduates enables them to capitalize on their latent talents and develop into creative, creative, and entrepreneurial individuals. The purpose of this study was to develop a model for an innovative and entrepreneurial Faculty of Sport Sciences. The research was conducted during the 2023–2024 academic period. A qualitative research design was employed, utilizing in-depth interviews with experts possessing substantial knowledge and experience in the field. Participants included individuals affiliated with science and technology parks, administrators of university innovation and entrepreneurship centres, representatives from the Faculty of Sport Sciences, entrepreneurship specialists, and faculty members. The participants were selected through purposive sampling using the snowball technique, resulting in a final sample of 13 interviewees. The interview data were analysed using the grounded theory approach. During the open coding stage, the identified concepts and indicators were extracted from the data. Through further analysis of the open coding findings, six principal categories were ultimately integrated into the axial coding paradigm. The findings indicated that the development of entrepreneurship programs, the establishment of innovation centres and business accelerators, increasing students' awareness of entrepreneurial opportunities, fostering interdisciplinary interactions, and continuous evaluation were among the key strategic components of an entrepreneurial Faculty of Sport Sciences. In this regard, it is essential for policymakers, administrators, and stakeholders within the Ministry of Science, Research and Technology, higher education institutions, and Faculties of Sport Sciences to create the necessary conditions for entrepreneurial transformation through alignment of attitudes and behaviours and the provision of appropriate institutional support. The novelty of this study lies in its emphasis on entrepreneurship within Faculties of Sport Sciences in response to the growing unemployment among university graduates and the vast economic and developmental potential of the sport sector. By highlighting entrepreneurship as a critical concern for students in this field, the study addresses an issue that has received relatively limited attention in previous research.

#### How to Cite This Article:

Radanfar, J., & Eidi, H. (2026). Presenting a Model for a Creative and Entrepreneurial Sports Science Faculty. *Journal of Sport Marketing Studies*, 7(1): 64-91. [10.22034/sms.2025.142557.1428](https://doi.org/10.22034/sms.2025.142557.1428)



## 1. Introduction

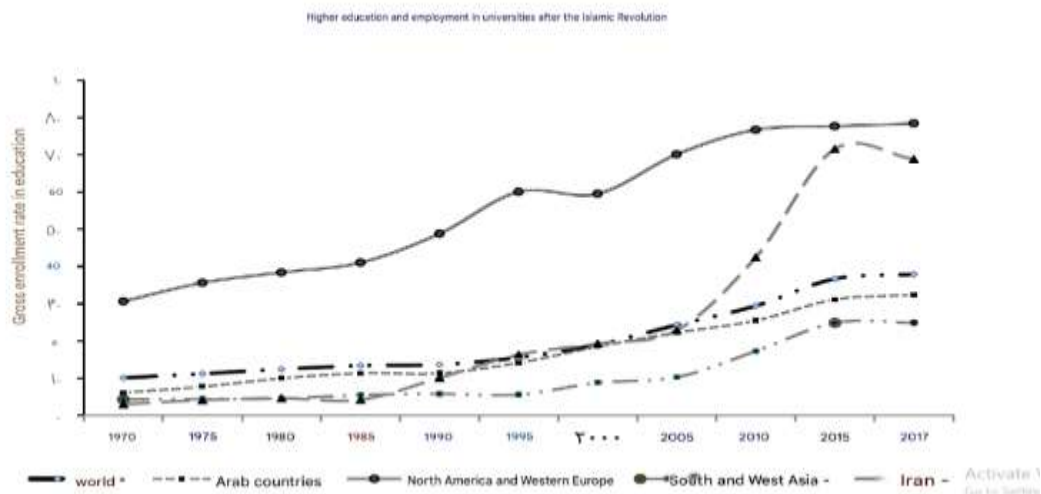
The increasing social demand for higher education, scarcity and limitations of resources, the rapid expansion of the frontiers of human knowledge, and the consequent transition of economic, social, and cultural activities toward knowledge-based systems have created significant challenges for higher education institutions. Furthermore, the emergence of both traditional and virtual academic competitors, coupled with rising societal expectations and the growing need for universities to respond effectively to these expectations, has compelled higher education administrators, planners, and policymakers to place greater emphasis on creativity and innovation in securing and allocating financial resources, as well as on developing more precise and context-sensitive strategic plans that align with both environmental and institutional needs. In this context, the emergence and development of the concept of the entrepreneurial university has been recognized as one of the fundamental necessities and strategic responses to these evolving conditions (Qureshi Khorasgani, 2019).

An entrepreneurial university, as a scientific, research-oriented, and specialized institution, not only fulfills its traditional academic functions but also places special emphasis on entrepreneurial concepts, requirements, and characteristics across all of its activities (Qureshi Khorasgani, 2019). To achieve greater alignment with local, regional, and international economic development processes, universities and higher education systems are increasingly transitioning from their traditional role of merely generating knowledge toward becoming entrepreneurial universities that, in addition to producing knowledge and generating ideas, actively transform them into practical applications and economic value. In fact, the rise of knowledge-based development paradigms and national development agendas has imposed an

entrepreneurial mission upon universities. This transformation has been evident in developed countries since the late 1980s (Kordnaeij, 2020).

The transformation of universities from first-generation (teaching-oriented) and second-generation (research-oriented) institutions into entrepreneurial universities is not merely desirable but essential. Neglecting this transformation may result in significant adverse consequences. The importance of this issue becomes even more pronounced in light of the persistent challenge of graduate unemployment. Unemployment among university graduates constitutes a serious socioeconomic problem in many countries, including Iran. Statistical reports indicate that the unemployment rate in Iran is approximately one-quarter of the labor force. Moreover, nearly 70% of Iran's population is under the age of 35. According to the Statistical Center of Iran, the unemployment rate among young people is nearly twice the national average unemployment rate (Seydaei & Zarei, 2020).

At the same time, the quantitative expansion of higher education in Iran and worldwide—often referred to as the massification and globalization of higher education—has generated numerous ambiguities and significant challenges. One of the key questions concerns the rationale underlying the rapid expansion of higher education in Iran compared with regional and global trends. Among the most notable developments in the country's higher education system has been the substantial increase in the number of higher education institutions, university students, and graduates, particularly during the post-revolutionary period. Figure 1 illustrates the trends in gross enrollment rates in higher education in Iran compared with those of neighboring countries and the broader region (Safari et al., 2019).



**Figure 1.** Gross enrolment ratio in the world and its various regions. Source: UNESCO Data Bank

Based on the data presented in Figure 1, it can be argued that the expansion of higher education in Iran has diverged from global and regional trends since approximately 2005 and has experienced a significantly steeper growth trajectory. Despite a substantial initial gap, Iran's higher education system has, by 2015, reached gross enrollment rates that are closely comparable to those of regions with the highest enrollment levels, including the United States and Western and Eastern Europe (Safari et al., 2019).

According to statistics published by the Statistical Center of Iran in 2016, approximately 40% of the country's unemployed population consisted of university graduates. Furthermore, the government has limited capacity to absorb only a small proportion of these graduates into the labor market. Therefore, given the persistent challenge of youth unemployment and the emphasis placed on production and employment in national development policies, particular attention to entrepreneurship—especially within universities and among students—has become increasingly important and necessary (Ahmadkhani et al., 2020).

Despite the substantial employment potential of the field of Sport Sciences, a considerable number of its graduates remain unemployed or are

employed in occupations unrelated to their academic training. In this context, entrepreneurship can serve as one of the most important and practical strategies for policymakers, planners, and administrators in the fields of sport and employment. A noteworthy concern, however, is the limited number of individuals capable of identifying entrepreneurial opportunities and possessing the characteristics commonly associated with successful entrepreneurs, including risk-taking propensity, achievement motivation, creativity, independence, and an internal locus of control, all of which are essential for establishing and sustaining new ventures (Fatahi & Rad, 2020).

Sport is widely recognized as a fundamental contributor to public health and social vitality. By enhancing physical and mental well-being, sport positively influences national productivity and, consequently, contributes to economic growth and development (Mondalizadeh & Honari, 2010). Given that sport and entrepreneurship share numerous collaborative and developmental dimensions, increasing attention has been directed toward fostering entrepreneurial competencies among students of Faculties of Sport Sciences. Universities are therefore expected to align the educational environments and curricula with the realities and challenges of the contemporary world and to develop innovative teaching and learning



strategies aimed at enhancing entrepreneurial skills

Before addressing the main themes of this study, it is necessary to clarify several key concepts, particularly entrepreneurship. Entrepreneurship has been defined as the process of discovering, evaluating, developing, and exploiting opportunities for the creation of future goods and services (Wieners & Weber, 2020).

An entrepreneurial university is an environment in which entrepreneurial individuals and groups contribute to the creation of innovation and wealth while maintaining effective and constructive relationships with industry, government, and society (Linjalone, 2020). Such a university provides opportunities, aspirations, cultural support, and enabling environments that encourage students and graduates to engage in entrepreneurial activities, making entrepreneurship an integral component of the institution's core mission (Taghipoor & Zahir, 2020). Furthermore, an entrepreneurial university is one in which academic entrepreneurship serves as a driving force for economic growth and enhances competitiveness in global markets (Albats, 2020).

Clark developed a model for entrepreneurship in higher education institutions that consists of five principal elements: a strong managerial core, an expanded developmental periphery, diversified funding sources, a strengthened academic heartland, and an integrated entrepreneurial culture. He argued that five key prerequisites are necessary for the transformation of a university into an entrepreneurial institution: organizational flexibility, a coherent entrepreneurial culture, continuous interaction with the external environment, a shared vision, future-oriented strategies, and attention to human resources (Hastig & Sodhi, 2020)

In explaining the entrepreneurial university approach within higher education systems, Clark identified several defining characteristics of entrepreneurial universities, including institutional

among students (González & Moreno, 2021). autonomy in pursuing activities related to their three core missions while accepting associated risks; active participation in the economic and social development of the surrounding region; flexibility in resource allocation and responsiveness to environmental needs; and the application of cost-benefit principles in institutional decision-making and operations. He further proposed that the concept of an entrepreneurial university can be understood from three complementary perspectives: first, the university functions as an entrepreneurial organization; second, its members—including faculty, students, and administrative staff—possess entrepreneurial characteristics; and third, interactions between the university and its external environment are guided by an entrepreneurial orientation.

Clark also identified several indicators and outcomes associated with the adoption of an entrepreneurial approach within universities, including the existence of a strong leadership committee that emerges from the active participation of administrators at different organizational levels and faculty members in strategic decision-making processes (Hastig & Sodhi, 2020).

Similarly, Drury conceptualized entrepreneurship as a comprehensive and planned process encompassing cultural, structural, and managerial dimensions. He proposed a conceptual model for the realization of the entrepreneurial university based on four pillars: the necessity of change and transformation, strategic planning for university development, program implementation, and evaluation accompanied by continuous feedback (Hastig & Sodhi, 2020).

Regarding previous studies in this field, Karami Darchamani, Eydi, and Zardashtian (2022) developed a model explaining the role of Faculties of Sport Sciences in fostering university-

community engagement. Their findings identified five major categories—knowledge production and human resource development, public awareness and community health, sport-based entrepreneurship and business development, social flourishing, and service provision—as the most important missions of Faculties of Sport Sciences in relation to society (Karami Darchamani, Eydi, & Zardashtian, 2022).

Keyhanikhah and Pourkarimi (2021), in their study entitled “Reconstructing the Entrepreneurship Ecosystem Model of Third-Generation Universities,” sought to identify the key components of the entrepreneurial ecosystem within third-generation universities and to develop a corresponding conceptual framework. Their findings categorized the ecosystem into four principal dimensions: academic factors (education, research, and learning systems), governance factors (entrepreneurial vision, management, laws and regulations, communications, support mechanisms, and business creation), infrastructural factors (soft and hard infrastructure), and financial factors (resource provision and allocation) (Keyhanikhah & Pourkarimi, 2021).

Similarly, Asheri (2024), in a study titled “Exploring the Executive Requirements and Success Indicators for Establishing an Entrepreneurial University: The Case of the University of Tehran,” examined a broad range of entrepreneurial university indicators, including entrepreneurial organizational structure, entrepreneurial organizational culture, entrepreneurial leadership style, university strategic planning, reward and evaluation systems, opportunity recognition, entrepreneurship education, organizational learning, entrepreneurial spirit development, environmental factors, commercialization of research outcomes, financial and professional independence of entrepreneurial students, faculty members, and staff, as well as resource management and internationalization. The study proposed a strategic framework for assessing and enhancing entrepreneurship indicators at the

University of Tehran. The findings revealed that the university still has considerable potential for improvement across all examined dimensions and that it has not yet achieved a satisfactory level of success in developing the characteristics of an entrepreneurial university (Asheri, 2024).

Furthermore, Peymanfar, Akbarian, and Noorani (2024), in their study entitled “Modeling Entrepreneurial Intention Based on the Climate of Faculties of Sport Sciences and Students’ Entrepreneurial Skills,” demonstrated that the organizational climate of Faculties of Sport Sciences exerts a positive and statistically significant effect on both entrepreneurial intention and entrepreneurial skills. In addition, entrepreneurial skills were found to have a significant positive impact on entrepreneurial intention. Their findings suggest that the university environment can provide a fertile context for the development of entrepreneurial competencies and capabilities, thereby strengthening students’ intentions to engage in entrepreneurial activities (Peymanfar, Akbarian, & Noorani, 2024).

Rahimi et al. (2022) found that prerequisites and driving forces constitute critical factors in the development of entrepreneurial activities within Faculties of Sport Sciences and in achieving the outcomes associated with university entrepreneurship. In other words, the transition of Faculties of Sport Sciences toward entrepreneurial institutions and third- and fourth-generation universities requires the establishment and implementation of essential prerequisites and enabling mechanisms within the institutional foundations of these faculties. These prerequisites and drivers, which encompass key structural and infrastructural dimensions, play a significant role in generating the outcomes associated with entrepreneurial universities (Rahimi et al., 2022).

Despite these developments, the structure of universities in Iran continues to focus primarily on providing specialized academic education rather than fostering entrepreneurial graduates. At the



same time, governmental organizations and even private-sector enterprises possess limited capacity to absorb the growing number of university graduates, making graduate unemployment an increasingly unavoidable reality. Given that admission to and completion of higher education require substantial investment from both individuals and governments, the underutilization of academic qualifications, graduate unemployment, or employment in occupations unrelated to one's field of study represents a significant waste of financial resources. Moreover, it results in the loss of individuals' most valuable assets—time and human potential. These concerns suggest a pressing need to reconsider the objectives of higher education systems and the policies that guide them.

In addition, entrepreneurship is a context-dependent phenomenon whose meaning and manifestation vary across different social settings and according to the lived experiences of diverse groups. Consequently, understanding entrepreneurship within the specific context of Faculties of Sport Sciences requires exploration of the experiences and perspectives of those directly involved in these institutions.

In summary, based on the preceding discussion and the research problem tree developed for this study, several factors can be identified as influential antecedents in the development of a creative and entrepreneurial Faculty of Sport

## **2. Methodology**

This study employed a qualitative research design based on the systematic grounded theory approach developed by Strauss and Corbin. Furthermore, the research adopted an interpretive paradigm, which is rooted in interpretivist epistemology, to develop a model of a creative and entrepreneurial Faculty of Sport Sciences. Within this paradigm, relationships among variables cannot be adequately explained through quantitative measures; rather, emphasis is placed on

Sciences. These include managerial and organizational challenges, insufficient resources and financial support, limited external investment, educational and research-related challenges, and sociocultural barriers.

Although numerous studies have investigated entrepreneurship in higher education, relatively few have generated a coherent body of knowledge regarding entrepreneurship within Faculties of Sport Sciences. Indeed, research providing an in-depth understanding of entrepreneurship in these faculties—particularly from the perspective of the lived experiences of faculty members and students—remains scarce. Consequently, entrepreneurship as experienced and understood within Faculties of Sport Sciences remains largely unexplored.

Accordingly, the present study seeks to investigate entrepreneurship through an examination of the lived experiences of faculty members and students in Faculties of Sport Sciences. By analyzing data derived from interviews and the experiences of experts and key stakeholders, this research aims to develop a comprehensive model for a creative and entrepreneurial Faculty of Sport Sciences. Such a model may contribute to increasing awareness of entrepreneurial opportunities, supporting successful entrepreneurs, and facilitating positive transformations within the field of sport sciences and higher education.

understanding, interpretation, and the construction of meaning. Therefore, this approach was considered appropriate for identifying the components, concepts, and codes associated with entrepreneurship in Faculties of Sport Sciences.

The study population consisted of experts, specialists, and stakeholders familiar with entrepreneurship in sport and related fields. Given the challenges associated with accurately defining,

identifying, and estimating the target population, initial participant identification was conducted through consultation with relevant institutions and key informants. These included officials from the Science and Technology Park of Razi University, the Dean and Department of Management of the Faculty of Sport Sciences at Razi University, the Director of the Entrepreneurship Café of the Faculty of Sport Sciences, entrepreneurship specialists, and faculty members. Based on their recommendations, an initial list of individuals possessing relevant academic, professional, and practical expertise was compiled.

Data were collected from both primary and secondary sources. Primary data were obtained through semi-structured interviews, while secondary data consisted of printed and electronic resources related to entrepreneurship and associated fields. Participant recruitment followed a purposive sampling strategy combined with snowball sampling. Although theoretical saturation and the basic conceptual framework of the phenomenon were achieved after nine interviews, data collection continued until the thirteenth interview to enhance conceptual richness, diversity of perspectives, and theoretical density.

All interviews were conducted over a five-month period, with an average interval of approximately twelve days between successive interviews. Interviews took place at the participants' workplaces and lasted between 20 and 45 minutes,

depending on the interviewees' level of expertise, experience, knowledge, and familiarity with the subject matter. With participants' consent, all interviews were audio-recorded and subsequently transcribed verbatim using Microsoft Word. Participants were assured that all information would remain confidential and would be used solely for research purposes.

The interview questions were designed to facilitate dynamic interactions and encourage constructive and meaningful dialogue between the researcher and participants. The main interview questions included:

1. What factors and conditions drive Faculties of Sport Sciences toward becoming entrepreneurial institutions?
2. What strategies can effectively contribute to the realization of an entrepreneurial Faculty of Sport Sciences?
3. What contextual and environmental conditions facilitate the implementation of entrepreneurial strategies within Faculties of Sport Sciences?
4. What barriers and challenges hinder the entrepreneurial transformation of Faculties of Sport Sciences?
5. What outcomes and consequences can be expected from the establishment of an entrepreneurial Faculty of Sport Science.

**Table 1.** The Research Process of the Present Study Based on the Saunders et al. (2009) Research Onion Model

Layer	Framework	Details	The approach of the present research
<b>First layer</b>	Research Philosophy	Determining a research philosophy or paradigm that reflects the researcher's worldview and perspective.	<b>Interpretive philosophy</b>
<b>Second layer</b>	Research approach	Determined based on the researcher's philosophical worldview	<b>Inductive approach</b>
<b>Third layer</b>	Research strategy	Research strategy refers to the research method.	<b>Applied research</b>
<b>Fourth layer</b>	Research selection	Research choices refer to the type of research data.	<b>Qualitative</b>
<b>Fifth layer</b>	Research time frame	Time period for conducting the research	<b>The duration of the research is one year.</b>
<b>Sixth layer</b>	Data collection and analysis method	Data collection and analysis methods	<b>Semi-structured interview</b>



### Trustworthiness and Reliability of the Findings:

To establish the trustworthiness and reliability of the findings, the present study employed the concept of trustworthiness and its multiple dimensions as proposed in qualitative research methodology. Several validation strategies were utilized, including continuous review during the coding process, member checking through

verification of findings with participants, and peer debriefing through consultation with research colleagues (Guba & Lincoln, 2008, as cited in Danaeefard & Mozafari). To assess coding reliability, the following test–retest reliability index was employed to measure consistency between the researcher’s coding results at two different points in time:

$$\text{reliability percentage} = \frac{2 \times \text{Number of agreements}}{\text{Total number of codes}} \times 100$$

To evaluate coding stability, eight interview transcripts were randomly selected and recoded by the researcher after a 30-day interval. Subsequently, the initial coding results were

compared with the recoded versions, and the level of agreement between the two coding rounds was calculated. The results of this comparison are presented in the following table.

**Table 2.** Coding test-retest reliability

Row	Interview title	Total number of codes	Number of agreements	Number of disagreements	Test-retest reliability percentage
1	P1	70	32	10	91%
2	P3	90	35	7	77%
3	P4	83	33	9	79%
4	P5	39	18	4	92%
5	P7	68	30	11	88%
6	P9	65	29	10	89%
7	P11	71	31	8	87%
8	P12	82	33	6	80%
<b>Total</b>		568	241	65	85%

As shown in Table 2, the total number of codes within the 30-day interval was 568, while the total number of agreements between codes during this period was 241 and the total number of disagreements was 65. Based on the applied formula, the test–retest reliability of the conducted interviews was calculated to be 85%. Given that this value exceeds the acceptable threshold of 60%, the reliability of the coding process was confirmed (Hooman, 2010, p. 20).

Finally, the data obtained from the interviews were analyzed through three stages of coding, namely open coding, axial coding, and selective coding. In addition, grounded theory data analysis procedures were employed to perform data reduction,

categorization, and interpretation of the findings, a process that requires the simultaneous and iterative collection and analysis of data (Strauss & Corbin, 2008).

Ultimately, the researcher reached the stage of theoretical saturation, meaning that the categories were sufficiently developed around the central phenomenon of the study and no further conceptual information emerged from the data. In other words, it was ensured that no additional properties or dimensions remained within the categories, indicating that theoretical adequacy had been achieved (Bazargan, 2008, p. 85). Subsequently, based on the analysis of the data and extraction of findings, the researcher proceeded to

present the entrepreneurial model of Faculties of Sport Sciences.

### 3. Research Findings

Regarding the demographic characteristics of the interview participants, among the 13 interviewees, 76% were male. In terms of educational level, 90% held a doctoral degree and 10% held a master's

degree. Additionally, 70% had academic backgrounds in Physical Education and Sport Sciences, and 61% had prior research experience in entrepreneurship (Table 3).

**Table 3:** Description Features Demographics Interviewees

Row	Expert Code	Gender	Education level	Field of activity	Field of study	Research background in entrepreneurship	Executive experience in the field of entrepreneurship
1	P1	Man	PhD	Scientific	Sports Management	*	*
2	P2	Man	PhD	Scientific/Executive	Sports Management	-	-
3	P3	Man	PhD	Scientific	Sports Management	*	*
4	P4	Man	PhD	Scientific/Executive	Sports Management	-	-
5	P5	Man	PhD	Scientific	Entrepreneurship	*	*
6	P6	Man	PhD	Academic/Executive	Entrepreneurship	*	*
7	P7	Woman	PhD	Academic / Executive	Sports Management	*	*
8	P8	Man	PhD	Academic/Executive	Sports nutrition	*	*
9	P9	Man	PhD student	Academic/Executive	Sports Management	-	-
10	P10	Woman	PhD student	Scientific	Sports Management	*	-
11	P11	Man	PhD	Academic/Executive	Entrepreneurship	*	*
12	P12	Man	PhD	Executive	Entrepreneurship	*	*
13	P13	Woman	PhD	Scientific	Sports management	*	*

The research findings were identified through simultaneous analysis and a continuous coding process conducted during and after the interviews. The results of the coding process are presented in a categorized manner. In the open coding phase, the identified concepts and indicators were extracted from the data. Further analysis of the open coding results led to the integration of findings into six main categories within the axial coding paradigm.

These categories included causal conditions, contextual conditions, intervening conditions, the central phenomenon, strategies, and consequences. Within the causal conditions, the categories derived from selective coding were briefly summarized as follows: the necessity of establishing an entrepreneurial faculty, remaining within first- and second-generation university models, training human resources aligned with labor market needs, financial support, and non-financial support (Table 4).

**Table 4.** Causal conditions affecting the entrepreneurship of sports science faculties

General categories (concepts)	Subcategories (components)	Dimensions and features (items)
	The necessity of an entrepreneurial school	<ul style="list-style-type: none"> <li>Increase in unemployed university graduates</li> <li>Decreasing research budgets</li> </ul>



<b>Global and economic changes</b>	Staying in the first and second generation of university	<ul style="list-style-type: none"> <li>• Return on research budgets</li> <li>• The theoretical nature of the discussion of entrepreneurship in colleges</li> <li>• Failure to progress and remain in the first and second generation of university</li> <li>• Preferring article production to entrepreneurship</li> <li>• Research-oriented nature of faculties</li> <li>• International connections with leading schools in the field of entrepreneurship                             <ul style="list-style-type: none"> <li>• Being young is the issue of entrepreneurship in the country</li> <li>• Weakness in international communication and research</li> </ul> </li> <li>• We are a first-generation university</li> </ul>
	Training human resources in line with labor market needs	<ul style="list-style-type: none"> <li>• Teaching skills-based lessons</li> <li>• Student empowerment</li> <li>• The skill-based nature of physical education</li> </ul>
<b>Support</b>	Financial support	<ul style="list-style-type: none"> <li>• Financial support</li> </ul>
	Non-financial support	<ul style="list-style-type: none"> <li>• Lack of motivation and entrepreneurial ideas</li> <li>• Creating motivation and hope in students</li> <li>• Lack of encouragement and support for innovative ideas</li> <li>• Supporting innovative ideas</li> </ul>

The review and analysis of the interview data regarding the contextual conditions influencing the entrepreneurial transformation of Faculties of Sport Sciences led to the identification of 58. Subsequently, through a more in-depth examination of the extracted concepts, their integration, and the identification of preliminary relationships among them within the contextual conditions, seven final categories influencing the entrepreneurial development of Faculties of Sport Sciences were identified. These categories were

distinct codes. Based on thematic similarity, these codes were further grouped into 20 conceptual categories.

further organized into three overarching macro-level dimensions.

These macro-level dimensions included managerial factors, economic factors, faculty culture and structure, and faculty policies and relations with industry and society.

**Table 5.** Contextual conditions affecting the entrepreneurship of sports science faculties

General categories (concepts)	Subcategories (components)	Dimensions and features (items)
<b>Faculty culture</b>	Innovation and risk-taking	<ul style="list-style-type: none"> <li>• Encouraging creativity and risk-taking                             <ul style="list-style-type: none"> <li>• Entrepreneurship ecosystem</li> <li>• Cultural and legal problems</li> </ul> </li> <li>• The level of commitment of professors to entrepreneurship education</li> <li>• Having an entrepreneurial outlook</li> </ul>
	Structure	<ul style="list-style-type: none"> <li>• Faculty Education Rules</li> <li>• The need for the necessary structure and</li> </ul>

		infrastructure	
<b>Faculty structure and policies</b>	Politics	<ul style="list-style-type: none"> <li>• Faculty macro policies</li> <li>• Organizational structure, policies, and management issues</li> </ul>	
	Faculty Management	<ul style="list-style-type: none"> <li>• Supporting innovative ideas</li> <li>• Having a plan in this area</li> <li>• The entrepreneurial perspective of the Dean of the Faculty</li> </ul>	
<b>Relationship with industry and society</b>	Establishing relationships with the community and sports organizations	<ul style="list-style-type: none"> <li>• Creating a communication channel with the community</li> <li>• Developing relationships with sports and related organizations</li> <li>• Cooperation with sports and recreation centers</li> <li>• Communication with sports equipment manufacturing companies</li> <li>• Cooperation with sports clubs and federations</li> </ul>	
		Social responsibility	<ul style="list-style-type: none"> <li>• Responding to the needs of society</li> <li>• Social responsibility and entrepreneurship</li> <li>• Building relationships with the local community</li> </ul>

The analysis of interview data concerning the intervening conditions affecting the entrepreneurial transformation of Faculties of Sport Sciences led to the identification of 47 distinct codes. Based on thematic proximity, these codes were further consolidated into 20 conceptual categories. Subsequently, through a more detailed examination of the extracted concepts, their further integration, and the identification of preliminary relationships

among them within the intervening conditions, six final categories influencing the entrepreneurial development of Faculties of Sport Sciences were identified. These categories were further organized into three overarching macro-level dimensions. These macro-level dimensions included resistance to change, financial constraints, and governmental support and policy-making.

**Table 6.** Intervening conditions affecting entrepreneurship in the Faculty of Sport Sciences

General categories (concepts)	Subcategories (components)	Dimensions and features (items)
<b>Resistance to change</b>	Fear of change and unwillingness to accept new methods	<ul style="list-style-type: none"> <li>• Resistance due to changing education model</li> <li>• Resistance due to the need to learn new skills</li> </ul>
	Insufficient financial resources to create entrepreneurial infrastructure	<ul style="list-style-type: none"> <li>• Need for necessary infrastructure</li> </ul>
<b>Financial constraints</b>	Providing the necessary funds for the development of new educational programs	<ul style="list-style-type: none"> <li>• Need for financial support</li> </ul>
	Financial support and government facilities	<ul style="list-style-type: none"> <li>• Encouraging the creation of knowledge-based companies</li> <li>• Bank facilities and low-interest loans</li> </ul>
<b>Government support and policies</b>	Compliance with rules and regulations and review of posts	<ul style="list-style-type: none"> <li>• Lack of expertise among key decision-makers in the field of sports</li> <li>• Institutionalization and providing a framework for one's role in relation to society</li> </ul>



	<ul style="list-style-type: none"> <li>• Creating a separate entrepreneurship platform alongside the field of education                     <ul style="list-style-type: none"> <li>• Preventing conflicts of interest                             <ul style="list-style-type: none"> <li>• Government policymaking</li> </ul> </li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• Communicating strategies from top to bottom, from the ministry to universities                     <ul style="list-style-type: none"> <li>• Upstream regulations and documents</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• Organizational structure and restrictive laws and regulations                     <ul style="list-style-type: none"> <li>• Adaptation in laws and regulations                             <ul style="list-style-type: none"> <li>• Political and cultural problems</li> <li>• Inflation and economic stability</li> </ul> </li> </ul> </li> </ul>
Sanctions, filtering	<ul style="list-style-type: none"> <li>• The effects of political and organizational issues                     <ul style="list-style-type: none"> <li>• Filtering                             <ul style="list-style-type: none"> <li>• Country boycott</li> </ul> </li> </ul> </li> </ul>

The analysis of the interview data concerning the strategies derived from contextual and intervening conditions influencing the entrepreneurial transformation of Faculties of Sport Sciences resulted in the identification of 101 distinct codes. Based on thematic similarity, these codes were further grouped into 32 conceptual categories (Table 4–9).

Subsequently, through a more comprehensive examination of the extracted concepts, further integration, and the identification of preliminary relationships among them within the

action/interaction strategies, eight final categories influencing the entrepreneurial development of Faculties of Sport Sciences were identified. These categories were further organized into five overarching macro-level dimensions.

These macro-level dimensions included the development of entrepreneurship programs, the establishment of innovation centers and accelerators, interdisciplinary interactions in sport sciences, raising students’ awareness, and evaluation indicators and selection criteria (Table 6).

**Table 7.** Strategies Effective in entrepreneurship of sports science faculties

General categories (concepts)	Subcategories (components)	Dimensions and features (items)
<b>Development of entrepreneurship programs</b>	Practical and project-based training	<ul style="list-style-type: none"> <li>• Producing content and educational programs related to the community</li> <li>• Evaluation and review of the educational program and content provided to the student                             <ul style="list-style-type: none"> <li>• Content and educational programs for students                                     <ul style="list-style-type: none"> <li>• The need for professors specializing in entrepreneurship</li> <li>• The need for a human resources specialist</li> </ul> </li> <li>• Content of training programs for teachers</li> </ul> </li> </ul>
	Providing human resources and expert trainers	<ul style="list-style-type: none"> <li>• Modeling from developed universities in the world</li> <li>• Using new technologies and new methods in education                             <ul style="list-style-type: none"> <li>• Soft skills training                                     <ul style="list-style-type: none"> <li>• Inadequate content and curriculum</li> </ul> </li> </ul> </li> </ul>
	Revision of curricula	<ul style="list-style-type: none"> <li>• Appropriateness or inappropriateness of educational content</li> </ul>

		<ul style="list-style-type: none"> <li>Needs assessment and development in education and innovative methods</li> </ul>
<b>Creating innovation centers and accelerators</b>	Creating growth centers and cooperating with science and technology parks	<ul style="list-style-type: none"> <li>Supporting startups                             <ul style="list-style-type: none"> <li>Establishing a growth center</li> <li>The need for an accelerator in college</li> </ul> </li> <li>Transforming research into action, product, and distribution in society</li> <li>Commercialization of science and knowledge</li> </ul>
	Strengthening the innovation ecosystem	<ul style="list-style-type: none"> <li>Communication and use of knowledge of people with entrepreneurial experience                             <ul style="list-style-type: none"> <li>Soft skills training</li> </ul> </li> <li>Holding workshops, seminars, and conferences around entrepreneurship</li> <li>Holding startup events and introducing businesses                             <ul style="list-style-type: none"> <li>Entrepreneurship Cafe</li> </ul> </li> </ul>
<b>Interdisciplinary sports interactions</b>	Joint interdisciplinary research	<ul style="list-style-type: none"> <li>Synergy between the field of sports science and the fields of engineering and medicine</li> <li>Moving research towards the field of entrepreneurship and turning it into a product</li> </ul>
<b>Informing students</b>		<ul style="list-style-type: none"> <li>Paying attention to career themes in classrooms                             <ul style="list-style-type: none"> <li>Presence in innovation centers</li> </ul> </li> <li>Changing the mindset of students with the idea of entrepreneurship</li> <li>Explaining the changing view of government jobs</li> <li>Increasing student awareness and knowledge of career opportunities and future by the university</li> <li>Using the lived experiences of successful people</li> </ul>
	Motivation and awareness	
<b>Evaluation</b>	Methods of evaluating and promoting faculty members and selecting students	<ul style="list-style-type: none"> <li>The need for an indicator to assess entrepreneurial activities</li> <li>The need for necessary criteria in the initial selection of students in the field of entrepreneurship</li> </ul>

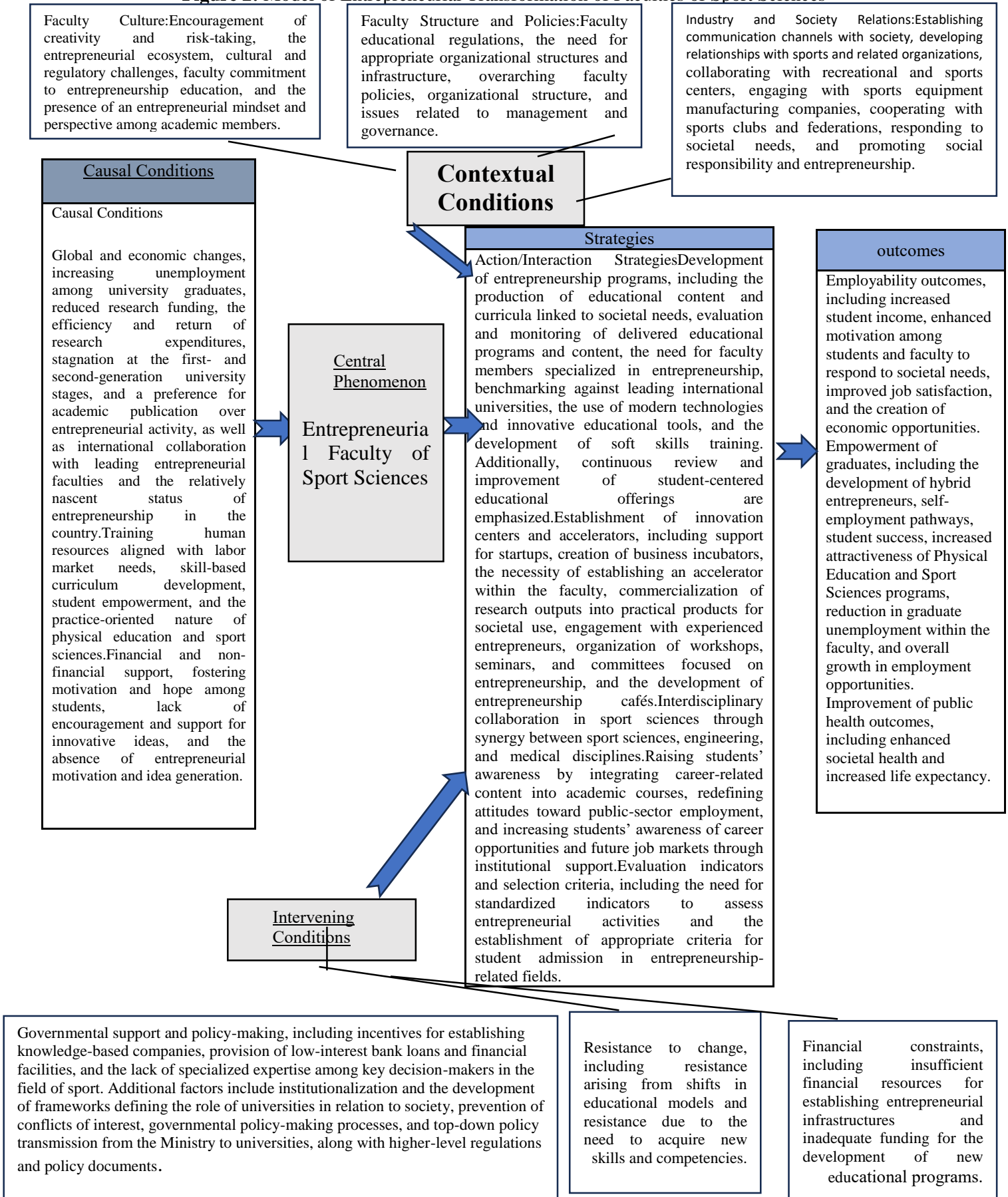
Consequences represent the outcomes of implementing the proposed strategies. Based on the examined internal and external conditions, as

well as the presented strategies, the following outcomes are expected to be achieved.

**Table 8.** outcomes Case Expecting sports science faculties to become entrepreneurs

General categories (concepts)	Subcategories (components)	Dimensions and features (items)
<b>Employability</b>	Satisfaction and economic aspect	<ul style="list-style-type: none"> <li>Improving student income</li> <li>Increasing the motivation of students and professors to respond to the needs of society                             <ul style="list-style-type: none"> <li>Job satisfaction</li> <li>Creating economic opportunities</li> </ul> </li> </ul>
	Ability to start sports businesses	<ul style="list-style-type: none"> <li>Hybrid entrepreneur                             <ul style="list-style-type: none"> <li>Self-employment</li> <li>Student success</li> </ul> </li> </ul>
<b>Empowering graduates</b>	Job creation	<ul style="list-style-type: none"> <li>Increasing acceptance of physical education</li> <li>Reducing unemployment among college graduates                             <ul style="list-style-type: none"> <li>Employment growth</li> </ul> </li> </ul>
	Increase and growth of health	<ul style="list-style-type: none"> <li>Increasing community health</li> <li>Increased life expectancy</li> </ul>

**Figure 2: Model of Entrepreneurial Transformation of Faculties of Sport Sciences**



Finally, to identify the overall relationships among the extracted categories, a conditional matrix was developed to facilitate a systematic and comprehensive examination of the conditions, strategies, and consequences associated with the phenomenon under study (Figure 2). It should be

noted that this matrix enables the researcher to identify and analyze conditions, strategies, and consequences, and to relate their different levels to one another within an integrated analytical framework.

#### 4. Discussion and Conclusion

The primary objective of this study was to develop a model for an entrepreneurial Faculty of Sport Sciences. In this model, the entrepreneurial transformation of Faculties of Sport Sciences was identified as the central phenomenon, around which all other categories were organized. The first category examined in this study was causal conditions, which encompass the factors influencing the central phenomenon. Through data reduction and analysis, conceptually related findings were integrated, resulting in the identification of three principal dimensions: global and economic changes, the development of human resources aligned with labor market needs, and financial and non-financial support.

The necessity of establishing an entrepreneurial Faculty of Sport Sciences has become increasingly evident, particularly under current circumstances characterized by numerous challenges. These challenges include rising unemployment among university graduates, declining research budgets, and the limited returns generated from research investments. One of the most pressing concerns is graduate unemployment, which is often attributable to a mismatch between graduates' competencies and labor market requirements, as well as insufficient practical experience. An entrepreneurial Faculty of Sport Sciences can address these challenges by offering applied and entrepreneurship-oriented educational programs that enhance students' practical competencies and better prepare them for employment opportunities.

The limited effectiveness of research funding can also be attributed to insufficient attention to societal needs and weak linkages between universities and industry. A substantial proportion of research expenditures is often allocated to studies whose outcomes have limited practical application in the marketplace. By focusing on market demands and the production of applied knowledge, an entrepreneurial Faculty of Sport Sciences can help bridge this gap. Furthermore, the lack of transparency and inequitable distribution of research funding has contributed to inefficiencies within the research system. Establishing a faculty with a strong entrepreneurial orientation can facilitate the attraction of private investment and increase financial resources available for applied and commercially relevant research.

Pikri Far and Meh Nigar (2012) argued that first- and second-generation universities primarily concentrate on knowledge production and scientific publications, whereas contemporary labor markets increasingly demand entrepreneurship and innovation. This mismatch often leaves graduates inadequately prepared for employment and contributes to higher rates of unemployment. In addition, faculty performance in many universities is assessed predominantly based on the number of published articles rather than their societal impact or contribution to entrepreneurial development. Consequently, researchers may prioritize publication output over the creation of innovative ventures and



entrepreneurial initiatives (Pikri Far & Meh Nigar, 2012).

Similarly, Zarin Joy and Androja (2023) emphasized that progress in entrepreneurship requires universities to establish collaborative relationships with leading institutions that possess advanced entrepreneurial infrastructures and experience in fostering innovation ecosystems. Such collaborations can facilitate the exchange of knowledge, expertise, and resources, thereby strengthening entrepreneurial ecosystems and supporting institutional transformation (Zarin Joy & Androja, 2023).

In this regard, Maaboodi (2024) and Engineer Farzin Entisarian, President of the Iran Quality To achieve greater alignment between higher education and labor market demands, skill-based courses should be integrated into academic curricula. Such an approach can empower students by equipping them with practical and applicable competencies that facilitate their transition into employment. Accordingly, the development of human resources aligned with labor market needs emerged as one of the key causal conditions influencing the entrepreneurial transformation of Faculties of Sport Sciences. Therefore, the findings of the present study are consistent with those reported by Pikri Far and Meh Nigar (2012) and Zarin Joy and Androja (2023) regarding the importance of preparing graduates whose competencies correspond to labor market requirements.

At the same time, governments in industrialized countries continue to provide direct financial support for higher education. In countries such as Germany and Finland, public funding constitutes a substantial proportion of higher education financing. Nevertheless, international trends indicate a gradual decline in the relative share of government funding over time, accompanied by increased efforts to encourage private-sector

Management Association (2023), argued that the current educational system in Iran faces significant challenges in supplying the workforce required by contemporary labor markets. Due to its emphasis on credentialism and insufficient attention to practical competencies, the educational system has not been fully successful in preparing skilled professionals capable of meeting the needs of industry and service sectors. As a result, organizations are often compelled to seek alternative solutions to address workforce shortages, leading to reduced productivity and increased operational costs.

participation and, in some cases, a greater transfer of educational costs to households.

Another notable trend is the shift in governmental support on the demand side of higher education, from direct grants and subsidies toward student loan programs. This approach not only supports students in financing their education but also enables governments to recover financial resources over time. On the supply side, governments have increasingly sought to create competitive environments among universities to attract external resources and strengthen institutional incentives for revenue generation. Consequently, both financial and non-financial support mechanisms play a critical role in fostering students' motivation, optimism, and willingness to engage in entrepreneurial activities.

The next category identified in this study was contextual conditions, which encompass the specific circumstances that influence the implementation of strategies. In other words, these conditions can be viewed as the internal factors affecting both the central phenomenon and the associated strategic actions. Through the process of data reduction and analysis, conceptually related findings were integrated, ultimately leading to the identification of three principal dimensions: faculty

culture, faculty structure and policies, and relationships with industry and society.

Encouraging creativity and risk-taking emerged as one of the most influential contextual factors within the cultural dimension of entrepreneurial transformation. The culture of Faculties of Sport Sciences should be shaped in a manner that fosters creativity and encourages students to take calculated risks. This requires the creation of an environment in which students feel confident presenting innovative ideas without fear of failure. In the Iranian context, however, cultural and social barriers, including negative perceptions of failure, may hinder the development of such creativity and entrepreneurial behavior.

Faculty commitment to entrepreneurship education was also identified as a critical factor in cultivating an entrepreneurial mindset among students. Faculty members should not only provide theoretical knowledge but also share practical experiences that prepare students for participation in the labor market. Such interactions can enhance students' self-confidence and encourage them to pursue entrepreneurial opportunities and innovative ideas.

faculties worldwide are necessary. This finding is consistent with the General Policies on Science and Technology communicated under Article 110 of the Constitution of the Islamic Republic of Iran. These policies emphasize the need to reform educational systems and improve the quality of higher education and research. Educational regulations within faculties should therefore be designed to enhance the quality of teaching and research activities. Such regulations encompass student admission systems, evaluation criteria, and accreditation mechanisms. For example, national science and technology policies emphasize the reform of admission systems and greater attention to students' talents and capabilities.

In addition, the availability of appropriate structures and infrastructures is essential for achieving educational and research objectives. These infrastructures include educational facilities, research environments, and access to scientific

Furthermore, the existence of a positive entrepreneurial outlook among both students and academic staff is essential. This perspective should be strengthened through appropriate educational initiatives, incentive programs, and collaborative learning environments. Promoting a culture of entrepreneurship and innovation can contribute to changing societal attitudes toward risk-taking and encourage individuals to pursue their aspirations and entrepreneurial ambitions (Safdarian, 2023). Therefore, fostering entrepreneurship within universities requires the identification of cultural and regulatory barriers and the development of effective mechanisms to overcome them in order to cultivate a new generation of creative and risk-taking entrepreneurs.

With regard to the dimension of faculty structure and policies and its associated categories, the interview findings indicated that the current situation is not yet satisfactory. Consequently, systematic planning based on best practices and benchmarking against leading entrepreneurial

resources (Khajapour, 2017). The findings further suggest that collaboration with recreational and sports centers can contribute significantly to the development of sports-related infrastructure. Such centers may serve as venues for sports events, educational programs, and community engagement activities.

The findings also highlighted the importance of the relationship between Faculties of Sport Sciences and external stakeholders. These faculties play a significant role in establishing effective connections with industry and society, thereby contributing to sports development and the enhancement of social well-being. Several key dimensions of these relationships were identified, including community engagement, collaboration with sports organizations, infrastructure development, technological advancement, event organization, research and development activities, and the creation of employment opportunities.



Jafari (2020) argued that close collaboration with sports clubs and federations in organizing competitions and sporting events can increase youth participation in sports and strengthen a culture of healthy competition within society. Accordingly, the findings of the present study are consistent with those of Khajapour (2017) regarding infrastructure development and with those of Jafari (2020) concerning event organization and institutional collaboration. These findings underscore the importance of strengthening university–industry–society linkages as a key component of the entrepreneurial transformation of Faculties of Sport Sciences.

The next category identified in the present study was intervening conditions, which encompass broader external factors and contextual circumstances that influence the implementation of strategies. Through the process of data reduction and analysis, conceptually related findings were integrated, resulting in the identification of three principal dimensions: resistance to change, financial constraints, and governmental support and policy-making.

Based on the interview findings, several challenges were identified that may hinder the entrepreneurial transformation of Faculties of Sport Sciences. One of the most significant challenges is resistance to change among faculty members and staff. Such resistance may stem from changes in educational models or from the need to acquire new entrepreneurial transformation of Faculties of Sport Sciences. Financial limitations represent one of the most significant challenges facing entrepreneurial development and educational innovation. These constraints may arise from a variety of factors, including limited financial resources, economic sanctions, and reductions in public revenues. Many institutions face considerable difficulties in securing adequate funding, which restricts their ability to implement entrepreneurial initiatives and innovation-oriented projects.

competencies and skills. Educational transformation often encounters opposition due to unfamiliarity with new teaching approaches, concerns regarding educational quality, attachment to traditional methods, and the demands associated with learning new skills. In addition, entrepreneurship requires innovation and creativity, both of which may challenge established organizational norms and practices. Teza and Cariol (2020) argued that the ability to think creatively and innovatively is fundamental to the development of new entrepreneurial products and services. Therefore, the findings of the present study are consistent with those reported by Teza and Cariol (2020) regarding the importance of innovation and creativity in entrepreneurial development.

Addressing resistance to change and facilitating the acquisition of new competencies are therefore essential prerequisites for entrepreneurial transformation. Overcoming these barriers requires systematic planning, appropriate training programs, and the development of an organizational culture that embraces change and continuous learning.

The findings further revealed that insufficient financial resources for establishing entrepreneurial infrastructure and inadequate funding for the development of new educational programs constitute major intervening factors affecting the

Furthermore, adverse economic conditions and international sanctions may negatively affect governmental revenues and the allocation of financial resources. This challenge is particularly evident in countries with high dependence on oil revenues. Consequently, financial constraints may significantly impede efforts to establish entrepreneurial ecosystems and support innovation-driven educational reforms.

Governmental support and policy-making also emerged as critical factors influencing the development of entrepreneurial universities and knowledge-based enterprises. Public policies can

facilitate entrepreneurial activities through the provision of financial incentives, economic support mechanisms, and regulatory frameworks that encourage innovation. Such support may include low-interest loans, tax exemptions, and administrative facilitation measures that contribute to the growth of knowledge-based companies and entrepreneurial initiatives within universities.

In this regard, governmental support through accessible banking facilities and low-interest loans can substantially reduce the initial costs associated with establishing new ventures. Such measures are particularly important for university students and graduates seeking to launch entrepreneurial businesses (Hassanzadeh et al., 2021).

Harorani and Arabic (2020) emphasized that inflation is one of the key factors influencing entrepreneurial activity. Severe price fluctuations resulting from ineffective economic policies may reduce investment incentives and create uncertainty for entrepreneurs. Their findings further demonstrated that economic instability can significantly weaken entrepreneurial motivation and investment behavior. Accordingly, the findings of the present study are consistent with those of Harorani and Arabic (2020) concerning the importance of governmental policies and economic support mechanisms.

Economic stability is therefore essential for attracting investment and supporting entrepreneurial activity. In addition, internet restrictions and international sanctions were identified as substantial barriers to entrepreneurship. These factors not only limit access to information and resources but also reduce opportunities for participation in global markets and international collaboration. Consequently, entrepreneurs and educational institutions must develop adaptive strategies to address these entrepreneurship education and program development.

Another important strategic category identified in this study was the need for faculty members with specialized expertise in entrepreneurship, as well as the importance of benchmarking against leading

challenges and maintain competitiveness under restrictive conditions.

Overall, the findings suggest that successful entrepreneurial transformation within Faculties of Sport Sciences requires careful attention to these intervening conditions and the development of practical mechanisms to overcome them.

Following the examination of causal, contextual, and intervening conditions, the study proceeded to identify the strategies necessary for the entrepreneurial transformation of Faculties of Sport Sciences. Strategies represent the specific actions and interactions that emerge in response to the central phenomenon and are influenced by both contextual and intervening conditions. The identified strategies were organized into five major domains designed to address both the internal and external challenges associated with entrepreneurial transformation. These domains included the development of entrepreneurship programs, the establishment of innovation centers and accelerators, interdisciplinary collaboration in sport sciences, student awareness and empowerment, and evaluation indicators and selection criteria.

The development of entrepreneurship programs has become a central component of educational systems worldwide. Entrepreneurship education plays a crucial role in cultivating entrepreneurial skills, attitudes, and competencies and contributes significantly to economic development. Khodabandeh (2021) emphasized that entrepreneurship education should be prioritized and introduced at earlier stages of education to foster creativity and innovation among future generations. Therefore, the findings of the present study are consistent with those of Khodabandeh (2021) regarding the importance of

entrepreneurial universities worldwide. To enhance the quality of entrepreneurship education, universities require experienced and knowledgeable faculty capable of delivering



relevant and up-to-date content. Haj Aghaei and Khalkhali (2019) argued that qualified faculty members play a critical role in preparing students for labor market participation through the provision of practical and contemporary educational content.

In addition, the adoption of advanced educational technologies and innovative learning tools was identified as a key strategy for facilitating entrepreneurial development. Examining and adapting successful educational models from developed countries can provide valuable insights for strengthening entrepreneurship education in Iran. Countries such as the United States and Canada have achieved notable success through entrepreneurship projects and specialized training programs designed to cultivate entrepreneurial competencies.

The use of emerging technologies and digital learning tools, together with the development of soft skills, was also identified as an important strategy for facilitating entrepreneurial transformation. Khanyordi et al. (2021) argued that modern technologies, including online platforms and digital tools, can significantly enhance the quality of entrepreneurship education by expanding access to learning resources and promoting greater interaction between students and instructors. Accordingly, the findings of the present study are consistent with those of Khanyordi et al. (2021) concerning entrepreneurship program development and the integration of innovative technologies.

Beyond technical competencies, attention should also be devoted to soft skills such as communication, teamwork, leadership, and problem-solving. These competencies are increasingly recognized as essential for success in contemporary professional environments and should therefore constitute an integral component of entrepreneurship education programs.

The findings further highlighted the importance of establishing innovation centers and accelerators as effective mechanisms for supporting start-ups and

creating business incubation opportunities within Faculties of Sport Sciences. Such centers facilitate access to resources, support the development of innovative ideas, and accelerate the commercialization process. Consequently, the establishment of innovation centers and accelerators can contribute not only to entrepreneurial development but also to broader economic growth.

Another strategic category strongly emphasized by interview participants involved the commercialization of research outputs, the utilization of entrepreneurial expertise, the organization of entrepreneurship-focused workshops, seminars, and committees, and the establishment of entrepreneurship cafés. Transforming scientific knowledge into marketable products and services remains one of the major challenges facing higher education institutions. Existing evidence suggests that knowledge translation processes can play a significant role in bridging the gap between research and practical application.

Finally, interdisciplinary collaboration between Sport Sciences and fields such as engineering and medicine emerged as an important strategy for entrepreneurial development. Interdisciplinary approaches are increasingly recognized as effective mechanisms for enhancing sports performance, promoting public health, and generating innovative solutions. Collaboration among Sport Sciences, Engineering, and Medical Sciences can therefore contribute significantly to improving quality of life, advancing athletic performance, and strengthening entrepreneurial opportunities within the sports sector.

The identified consequences of the entrepreneurial transformation of Faculties of Sport Sciences included employability, graduate empowerment, and improvement of public health. The outcomes associated with the employability dimension comprised increased student income, enhanced motivation among students and faculty members to

respond to societal needs, greater job satisfaction, and the creation of economic opportunities.

Employability, as a key concept in higher education, refers to students' ability to successfully enter the labor market and secure sustainable challenges. Educational programs emphasizing practical and experiential learning can significantly enhance students' employability. Such initiatives include internships, collaborative projects, industry placements, and work-integrated learning experiences. Rizki and Mousavi (2021) reported a positive relationship between job satisfaction and employability, arguing that individuals who are satisfied with their jobs demonstrate higher levels of motivation, effort, and professional development, ultimately leading to increased productivity. Therefore, the findings of the present study are consistent with those of Rizki and Mousavi (2021) regarding employment generation and motivational outcomes.

Ultimately, attention to the various dimensions of employability can contribute to improved quality of life, higher income levels, and the development of a more sustainable and socially committed society.

Another major consequence identified in the present study was graduate empowerment, including categories such as hybrid entrepreneurship, self-employment, student success, increased interest in Sport Sciences programs, reduced unemployment among graduates, and overall employment growth. Masoom et al. (2020) found that entrepreneurship education within universities plays a critical role in empowering students. Such educational initiatives not only increase the number of entrepreneurs but also strengthen the competencies required for successful participation in the labor market. Accordingly, the findings of the present study are consistent with those reported by Masoom et al. (2020) concerning graduate empowerment.

Nevertheless, some graduates have expressed dissatisfaction with the quality of educational programs provided by universities, a factor that

income. This concept not only affects students' economic prospects but also strengthens the motivation of both students and faculty members to address societal demands and

may negatively affect their readiness to establish entrepreneurial ventures. Today, Physical Education and Sport Sciences are among the most popular fields of study in higher education; consequently, entrepreneurship and investment within the sports sector represent significant opportunities for economic development and job creation.

Furthermore, Farid et al. (2021) emphasized that strengthening university–industry linkages is one of the most effective strategies for improving graduate employment outcomes. Graduate unemployment remains one of the most pressing challenges facing Iranian society. This issue not only negatively affects the personal lives of graduates but may also generate broader social and political consequences. Therefore, a systematic and organized approach to employment creation and talent identification is required. Existing evidence suggests that facilitating and developmental factors play a crucial role in promoting graduate employment. Identifying these factors and creating an appropriate framework for strengthening the relationship between universities and labor markets can substantially contribute to employment growth (Nadri et al., 2021).

Consequently, empowering graduates through high-quality educational programs aligned with labor market needs represents a fundamental strategy for reducing unemployment and enhancing student success in professional environments.

Among the most significant consequences of entrepreneurial Faculties of Sport Sciences is the **improvement of public health**, reflected in enhanced community health and increased life expectancy. Entrepreneurial Faculties of Sport Sciences can significantly contribute to public



health promotion through several interconnected mechanisms.

Educational and sports programs offered by these faculties can encourage greater participation in physical activity among community members. Through workshops, seminars, and public outreach initiatives, faculties can raise awareness regarding the importance of regular exercise and healthy

regular exercise can reduce stress, anxiety, and depression, all of which contribute to improved quality of life and increased life expectancy. Moreover, group-based sports programs provide valuable opportunities for social interaction and community engagement. These interactions can strengthen social support networks and foster a sense of belonging, both of which are recognized as important determinants of well-being and longevity.

In conclusion, an entrepreneurial Faculty of Sport Sciences, through its focus on improving public health and enhancing life expectancy, can play a substantial role in improving the overall quality of life within society. Such contributions extend beyond physical health outcomes and encompass significant psychological and social benefits, thereby supporting sustainable social development and community well-being.

In summary, whether the entrepreneurial transformation of higher education emerges as a historical and organic necessity or as a planned and policy-driven initiative, it represents a tangible reality confronting societies worldwide. This transformation presents both opportunities and challenges. The extent to which it becomes either a threat or an opportunity depends largely on a society's political, economic, legal, cultural, and social structures, as well as its governance systems and strategic planning processes.

The present study not only provides an implicit depiction of the current and desirable states of entrepreneurial transformation within Faculties of Sport Sciences but also offers an overview of the challenges associated with this phenomenon.

nutrition. Such educational efforts have the potential to influence health-related behaviors and foster healthier lifestyles within society.

Physical activity positively affects not only physical health but also psychological well-being. Research has consistently demonstrated that

Furthermore, it proposes a set of practical strategies aimed at empowering Faculties of Sport Sciences to become more entrepreneurial. It is hoped that policymakers, higher education administrators, and the Ministry of Science, Research and Technology will utilize this innovative approach to advance their objectives, particularly those related to economic development and employment generation.

#### **Practical Recommendations:**

Based on the analysis of interview data, the review of relevant literature, and the study's findings and conclusions, the following practical recommendations are proposed:

- 1. Development of Entrepreneurship Programs and Educational Content in Faculties of Sport Sciences**  
To educate graduates capable of assuming entrepreneurial roles, existing curricula require substantial revision. It is recommended that current educational content be updated with a stronger emphasis on practical and applied entrepreneurial skills in sport, case studies of successful sports entrepreneurship initiatives, and training in innovation and creativity strategies relevant to sports-related businesses.

- 2. Establishment of Sports Innovation and Technology Centers within Faculties**

Creating innovation and entrepreneurship ecosystems within Faculties of Sport Sciences can provide a supportive environment for student ideas and entrepreneurial projects. Such centers can offer financial resources, professional consulting services, and technical facilities required for launching start-up ventures.

One of the most important steps toward entrepreneurial transformation is the establishment of specialized sports innovation centers and business accelerators. These institutions can serve as primary catalysts for the **creation and growth of sports-related start-ups through:**

- Providing an appropriate environment for innovation and experimentation with new ideas.
- Supporting entrepreneurial projects through seed funding, technical assistance, and professional mentoring.

### 3. Organization of Entrepreneurship Events within Faculties of Sport Sciences

Faculties should regularly organize entrepreneurship-oriented events, including start-up weekends, innovation competitions, networking sessions, entrepreneurship forums, and innovation festivals. Such events can foster entrepreneurial thinking, facilitate knowledge exchange, and encourage students to pursue entrepreneurial opportunities.

### 4. Development of Virtual Networking Platforms for Sports Entrepreneurship

The creation of digital networking platforms and online communities dedicated to sports entrepreneurship can provide valuable opportunities for students, graduates, researchers, and industry stakeholders to exchange knowledge, identify entrepreneurial opportunities, and establish collaborative partnerships. Social media platforms and virtual environments can play an important role in strengthening these networks.

### 5. Promotion of Interdisciplinary Collaboration and Industry Partnerships

Collaboration between Faculties of Sport Sciences and entrepreneurship-related disciplines, industries, and successful entrepreneurs can significantly enhance students' educational and practical experiences.

One of the most important actions in the entrepreneurial transformation of Faculties of Sport Sciences is raising students' awareness of

- Offering pilot-testing opportunities for innovative sports products and services.
- Establishing specialized sports accelerators that provide networking opportunities, intensive training programs, mentorship, and access to early-stage investment.
- Creating connections between Faculties of Sport Sciences and the sports industry.
- Facilitating collaboration between students, researchers, entrepreneurs, and investors through professional networking platforms.

entrepreneurial opportunities and competencies. Such awareness can be promoted through:

- Entrepreneurship workshops and specialized seminars.
- Training in business planning, innovation management, resource management, and sports product development.
- Entrepreneurship awareness programs aimed at fostering innovative thinking and risk-taking behavior.
- Individual and group mentoring programs involving successful entrepreneurs and business coaches.
- Showcasing entrepreneurial success stories and recognizing successful sports entrepreneurs as role models to inspire students.

### 6. Synergistic Collaboration among Sport Sciences, Engineering, and Medical Sciences

Interdisciplinary collaboration represents one of the most effective approaches to strengthening sports entrepreneurship. Strategic partnerships among Sport Sciences, Engineering, and Medical Sciences can create innovative opportunities for the development of new products, services, and technologies.

#### Development of Innovative Sports Technologies through Engineering

Collaboration between Sport Sciences and Engineering faculties can facilitate the design and development of advanced sports equipment and



technologies. Joint projects may focus on areas such as robotics, artificial intelligence, biomechanics, wearable technologies, and precision instruments aimed at improving athletic performance and preventing sports injuries.

#### Advancement of Sports Health through Medical Collaboration

Partnerships between Sport Sciences and Medical Sciences can support research and innovation in areas such as sports nutrition, sports psychology, rehabilitation, injury prevention, and athlete health management.

#### Entrepreneurship in Sports-Medical Technologies

Collaboration between Sport Sciences and Medical Sciences can lead to the development of innovative products, including smart sportswear, biometric monitoring systems, rehabilitation devices, and advanced physiotherapy technologies. Such products possess significant commercialization potential in both domestic and international markets.

### **Research Limitations**

- The experts participating in the study were selected through a non-random, purposive sampling approach.
- Despite continuous follow-ups, it was not possible to conduct interviews with some of the intended participants.
- .
- Evaluating the impact of entrepreneurship education programs on empowering sports science students.
- Investigating the role of innovation centers and sports accelerators in the formation of sports startups.

### **5. Conflict of Interest**

The authors declare that there is no conflict of interest.

### **6. Financing**

### **Establishment of Joint Research Projects**

Faculties of Sport Sciences, in cooperation with Engineering and Medical Sciences, should initiate interdisciplinary research projects focused on sports innovation. These projects may include the development of advanced technologies for performance assessment, sports equipment enhancement, and the creation of innovative products for both professional and recreational sports.

Through the implementation of these recommendations, Faculties of Sport Sciences can strengthen their entrepreneurial capacity, enhance graduate employability, contribute to economic development, and establish themselves as key actors within regional and national innovation ecosystems.

- There was a lack of access to certain reliable and well-documented sources regarding the process of entrepreneurial transformation of faculties.

### **Research Suggestions**

- Examining the role of interdisciplinary education in the development of sports entrepreneurship.
- Analyzing cultural and structural challenges in sports entrepreneurship.
- Conducting a comparative study of entrepreneurship models in sports science faculties across different countries.

**Funding:** This study was not funded by any university or organization.

### **7. Acknowledgements**

The authors consider it their duty to sincerely express their appreciation and gratitude to all

individuals who contributed to and supported the completion of this research. Their valuable

cooperation and assistance are deeply acknowledged and appreciated.

## 8. Reference

- [Aghaei, S. J. \(1378\). Entrepreneurial organizations. Tehran: Public Management Education Center.](#)
- [Aghajani, A. \(1391\). Entrepreneurship and management of knowledge-based businesses. Secretary General of the National Conference, Mazandaran, Babolsar, November 12.](#)
- [Ahmadkhani, Iraj, GALAVANDI, HASSAN, & MOHAJERAN, BEHNAZ. \(2020\). Identifying and Ranking the Barriers of Students' Entrepreneurship in Higher Education System \(From the Viewpoint of Faculty Members of Zanjan University\). INTERDISCIPLINARY STUDIES ON STRATEGIC KNOWLEDGE, 9\(37\), 305-330. SID. <https://sid.ir/paper/265079/en>\[Persian\].](#)
- [Albats, E. \(2020\). Facilitating university-industry collaboration with a multi-level stakeholder perspective. The Crest of the Innovation Management Research Wave, 257.](#)
- [Aldawod, A. \(2022\). A framework for the opportunity recognition process in UK entrepreneurial universities. Technological Forecasting and Social Change, 175, 121386. <https://doi.org/10.1016/j.techfore.2021.121386>](#)
- [Amiri-Lergani, M., Khairandish, M. A., & Skou, V. \(2017\). Analyzing barriers to organizational entrepreneurship in universities: A case study of Gonbad Kavos University.](#)
- [Asadpour, M., Kiaramesh, R. A., & Khabeyri, M. \(2019\). The role of sports team identity and organization on the success of sports cause marketing programs \(Case study: Mizu company\). Journal Name, Volume\(Issue\), page range. <https://doi.org/xxxxxx> \[Persian\].](#)
- [Asheri,rasool. \(2024\). An exploration into understanding the implementation requirements and success indicators in creating an entrepreneurial university. National Conference on Management and Humanities Research in Iran. SID <https://sid.ir/paper/1145455/fa>. \[Persian\].](#)
- [Bagheri, M., Fazlipour, S. M., & Mousavinasab, A. \(2019\). Relational study of cultural values and entrepreneurial spirit with regard to the mediating role of stereotyped beliefs. Women's Strategic Studies, 23\(90\), 83-101.](#)
- [Bazargan,abas\(2008\). Introduction to Qualitative and Mixed Research Methods: Different approaches in behavioral sciences,Tehran:paydar Publications.89. \[Persian\].](#)
- [Dadukolai, M. A., & Asgharanjad, L. \(2014\). The importance and necessity of paying attention to entrepreneurship in agricultural education programs.](#)
- [Dunya Eghtesad Magazine. \(2023, December 10\). \[Title of the article\]. Dunya Eghtesad. <https://donya-e-egtesad.com/fa/tiny/news-4034050> \[Persian\].](#)
- [Eshmit, N., Bezanilla, M.-J., García-Olalla, A., Auzmendi, E., & Paños, J. \(2017\). Factors and maturity level of entrepreneurial universities in Spain. \[Journal Name\], \[Volume Number\]\(\[Issue Number\]\), \[Page Range\].](#)
- [Esmaili, M. H., Fard, M. M., Nesab, P. S., & Bansbardi, A. \(2014\). Relationship between dimensions of service quality and loyalty of sports tourists in Mashhad sports water parks.](#)
- [Etzkowitz H. Research groups as 'quasi-firms': the invention of the entrepreneurial university. Research Policy. 2003; 32\(1\): 109-121.](#)
- [Farhani, A., et al. \(2008\). The role of the topic and the effectiveness of physical education courses in the entrepreneurship of graduates of this field. Sports Management Magazine, 1, Summer 2018. \[Persian\].](#)
- [Fashihi, H. \(2015\). Identifying and prioritizing the barriers of communication between industry and university \(case study, Urmia city\). Government](#)



- Ministry of Science, Research, and Technology - Urmia University - Faculty of Industry, Urmia University. [Persian].
- Fathi M, Rad M, Tahereh S. Identifying factors affecting the creation and promotion of entrepreneurship among physical education and sports science students. *Scientific-Research Quarterly of Applied Researches in Sports Management*. 2020;9(1):49-63. (Persian) <https://doi.org/10.30473/arsm.2020.7095>. [Persian].
- Gibb, A. A. (2020). Enterprise culture – Its meaning and implication for education and training. *Journal of European Industrial Training*, 41(2), 78-92.
- González-Serrano MH, Moreno FC, Hervás JC. Sport management education through an entrepreneurial perspective: Analysing its impact on Spanish sports science students. *The International Journal of Management Education*. 2021;19(1):100271. DOI:10.1016/j.ijme.2018.11.007.
- Habibirezaei, M., & Siah Mansouri, Y. (2012). The realization of third generation universities through the development of academic growth centers. *Nasha Alam*, 03(1), 43-49. Retrieved from [https://www.sciencecultivation.ir/article\\_24242\\_6\\_0b33bef952275a2ed84d407d5c68086a.pdf](https://www.sciencecultivation.ir/article_24242_6_0b33bef952275a2ed84d407d5c68086a.pdf) [Persian].
- Hassanzadeh Mahmudabad, M. H., Ekrami, M., Dashtaki, A. K., & Hafezi, H. (2021). Designing the conceptual model of the third generation university in the distance higher education system: Study case of Payam Noor University.
- Hastig, G. M., & Sodhi, M. S. (2020). Blockchain for supply chain traceability: Business requirements and critical success factors. *Production and Operations Management*, 29(4), 935-
- Hooman, heydarifar (2010). A Practical Guide to Qualitative Research: teran.smt Publications. 18-20. [Persian].
- Kavousi, R. (2017). Entrepreneurship, an opportunity to solve social harms. Ministry of Education and Training, Educational Research and Planning Organization, Publications and Educational Technology Office. [Persian].
- Kazemi, M., Reza, O., & Yavor, O. (2013). Sports entrepreneurship: An emerging approach in entrepreneurship and sports management. *Two Quarterly Research Journals in Sports Management and Movement Behavior*, 1(2), 69-84. [Persian].
- Kermi Darchamani, N, Eydi, H , Zardashtian, S. (2022). Presenting the role-playing model of the sports science faculty of the country in relation to the society. *Research in educational sports*, 9(22), 75-96. doi: 10.22089/res.2019.7856.1734954. [Persian].
- Keykhah, ahmad, karimi, javad, (2021), Recreating the Third Generation University Entrepreneurial Ecosystem Model. *Teaching on Marine Sciences* ‘Vol: 8 ‘Issue: 1. <https://civilica.com/doc/1227066/>.
- Khodabandeh, L. (2021). A comparative study of secondary school entrepreneurship education in selected countries and providing solutions for Iran's educational system.
- Kordnaeij A, Ahmadi P, Ghorbani Z, Niakan N. Investigating the Characteristics of Entrepreneurial University at Tarbiat Modares University. *Entrepreneurship Development Magazine*. 2020;3(5): 47-64. [Persian].
- Lahikainen, K., Kolhinen, J., Ruskovaara, E., & Pihkala, T. (2019). Challenges to the development of an entrepreneurial university ecosystem: The case of a Finnish university campus. *Industry and Higher Education*, 33(2), 96-107.
- Linzalone, R., Schiuma, G., & Ammirato, S. (2020). Connecting universities with entrepreneurship through digital learning platform: functional requirements and education-based knowledge exchange activities. *International Journal of Entrepreneurial Behavior & Research*.

- Maboudi, A. (2024). 10 reasons for the importance of manpower training. Modirno. <https://modirno.org> [Persian].
- Mandalizadeh, Z., & Habib, H. (2013). Statement of the mission of entrepreneurship in sports in the country from the point of view of experts. *Applied Researches in Management*, 2, Summer 2013. [Persian].
- Melkipour, A., Mirjalili, S. M. A., & Masouma, F. (2020). Explaining the compatibility and transition path of the desired framework elements of the curriculum of entrepreneurship education in higher education from the ideologies of the Skyro curriculum. [Persian].
- Moghimi, S. M. (1383). *Entrepreneurship in civil society institutions*. Tehran: University of Tehran Press.
- Mohamad Hasan Peymanfar, Mahdi Akbarian, Seyede Zahra Noorani. Modeling Entrepreneurial Intention Based On The Climate of Sports Science Faculties And Students' Entrepreneurial Skills, *Research in Sport Management & Motor Behavior*, 2024; 14(27): 224-245. [Persian].
- Molavi, P., et al. (2016). Investigating effective factors in reducing the academic motivation of students of Ardabil University of Medical Sciences. *Scientific Journal of Medical Organization of the Islamic Republic of Iran*, 25(1), 53-58. [Persian].
- Mondalizadeh, Z., Honari, H. Survey the factor affecting on sport entrepreneurship: as a interdisciplinary area, *interdisciplinary journal*.2010; 2(2): 113- 136. (Persian). <https://doi.org/10.7508/isih.2010.06.006>. [Persian].
- Pikrifar, F., & Mahnegar, F. (2011). Evaluation of the role of universities in the development of entrepreneurship. In *Proceedings of the National Conference on Entrepreneurship and Business Management* (pp. [page numbers if available]). [Publisher if available]. [Persian].
- Qureshi Khorasgani, M. A. (2019). Guest editor: Looking at the university from the perspective of entrepreneurship. *Science and Technology Policy*, 12(1), 1-2. Retrieved from <https://jstp.nrisp.ac.ir/article>.
- Rahimi, A. Ehsani, M. Safari, M. & Nowrozi Seyed Hosseini, R. (1401). Identifying and modeling the components and indicators of academic entrepreneurship evaluation in sports science faculties. *Research in educational sports*. 10(29), 17-44. [Persian].
- Ramezani Nejad, R., Broumand, M., & Ahmadi, F. (2013). Entrepreneurship ecosystem: A new approach for the development of sports entrepreneurship. *Contemporary Researches in Sports Management*, 8(1397).
- Rothaermel, F. T., Agung, S. D., & Jiang, L. (2007). University entrepreneurship: A taxonomy of the literature. *Industrial and Corporate Change*, 16(4), 691-791.
- Safari, S., Arvin, B., & Karimipour, K. (2019). Higher education and employment in Post-Islamic revolution University. *Journal of Science & Technology Policy*, 11(1), 1-14. {In Persian}. DOI: 10.22034/jstp.2019.11.1.2045. [Persian].
- Safari, S., Arvin, B., & Karimipour, K. (2019). Higher education and university employment after the Islamic revolution. *Science and Technology Policy*, 12(1), 2-14. <https://doi.org/10.22034/jstp.2019.11.1.2045> [Persian].
- Safari, S., Arvin, B., & Karimipour, K. (2019). Higher education and university employment after the Islamic revolution. *Science and Technology Policy*, 12(1), 2-14. <https://doi.org/10.22034/jstp.2019.11.1.2045>
- Saunders, Mark ; Lewis, Philip; Thornhill, Adrian (2009). *Research methods for business students*. Fifth edition. Harlow: Pearson Education.
- Seydaei SE, Bahari E, Zarei A. Study of the status of employment and unemployment in Iran during 1990-2010. *Rahbord Tosee Journal*. 2020; 12(25):37-45. [Persian].
- Smith, S., Hamilton, M., & Fabian, K. (2019). Entrepreneurial drivers, barriers and enablers of computing students: Gendered perspectives from an Australian and UK university. *Studies*



in Higher Education, 45(9), 1892–1905.  
<https://doi.org/10.1080/03075079.2019.1637840>

Taghipoor Zahir,ali,hasanmoradi,narges‘ A  
suitable model for creating an entrepreneurial  
university, Scientific Research Journal of  
Economics and Management, number  
69,summer 2020. [Persian].

Taheri-Abdvand, A., & Safari, J. (2018). The  
position of entrepreneurship education in the  
topics of Persian language and literature with  
emphasis on behavioral approach. Research and  
Writing Academic Books, 44(23), 76-98.

Retrieved from  
<https://www.noormags.ir/view/ar/articlepage/1504493> [Persian].

Tasnim News Agency. (2024). Economic news.  
Tasnim News Agency. <https://tn.ai/3079512>  
[Persian].

Wieners, S., & Weber, S. M. (2020). Athena’s  
claim in an academic regime of performativity:  
Discursive organizing of excellence and gender  
at the intersection of heterotopia and  
heteronomia. Management Learning,  
[13505076209](https://doi.org/10.1177/1350507620913505076209)